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EXAMINER

DOAN, PHUOC HUU

ART UNIT PAPER NUMBER

2684

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015,781

Applicant(s)

CARROLL, ERNEST A.

Examiner

Phuoc H Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1- 20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-17 and 20 is/are rejected.
- 7) ☒ Claim(s) 3,18 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, and 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al. (US Patent No: 6,035,710) in view of Melero et al. (Pub. No.: US 2003/0088362).

As to claim 1, Hutchison et al. disclose a method of rapidly obtaining geospatial data (col. 3, lines 25-42), processing the geospatial data (col. 5, lines 27-35), and disseminating the geospatial data to at least one ultimate user (col. 6, lines 42-45), comprising the steps of: obtaining digital data corresponding to geospatial images from a downward looking collection platform (Fig. 4, item 110). See col. 3, lines 50-55, and transmitting the digital data to the earth (col. 4, lines 32-40, and col. 7, lines 17-22). However, Hutchison et al. do not disclose that receiving transmitted digitized data, generating communication signals corresponding to the digitized geospatial data, and transmitting the communication signals over a communications channel; receiving the communication signals at a data processor coupled to the communications channel; converting the communication signals to digitized data; selectively modifying the digitized data by adding data derived from at least one other

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source; and transmitting modified digitized data through the communications channel to a user.

Melero et al. disclose that receiving transmitted digitized data (col. 2, paragraph [0024]), generating communication signals corresponding to the digitized geospatial data (col. 2, paragraph [0023]), and transmitting the communication signals over a communications channel (col. 2, paragraph [0025]); receiving the communication signals at a data processor ("image assembly server", Fig. 1, item 12) coupled to the communications channel (col. 2, paragraph [0025]); converting the communication signals to digitized data (col. 2, paragraph [0026]); selectively modifying the digitized data by adding data derived from at least one other source (col. 3, paragraphs [0028], and [0032]); and transmitting modified digitized data through the communications channel to a user (col. 4, paragraphs [0035-0038]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the modified digitized data through the communications channel of Melero et al. to the system of Hutchison et al. in order to provide delivery of the desired output image to the user via an electronic medium such as the Internet.

As to claim 2, the combination of Hutchison et al. and Melero et al. disclose that wherein the steps of transmitting and receiving communications signals and transmitting modified digitized data through a communications channel include the further step of transmitting and receiving the communications signals and transmitting the modified digitized data over the Internet (col. 3, paragraph [0028] of Melero et al.).

As to claim 4, Hutchison et al. further disclose that wherein said step of obtaining digital data corresponding to geospatial images from a downward looking collection platform (Fig. 4, item 110). See col. 3, lines 50-55, and transmitting the digital data to the earth (Fig. 1, item 12) comprises the further step of transmitting the digital data to the earth in radiant energy form (col. 4, lines 32-40, and col. 7, lines 17-22).

As to claim 5, the combination of Hutchison et al. and Melero et al. disclose the further steps of: providing an output device capable of receiving and processing the modified digitized data (col. 3, paragraph [0032], and col. 4, paragraph [0035] of Melero et al.); causing the output device to receive and process the modified digitized data (col. 4, paragraphs [0036-0037] of Melero et al.); and generating a visual output representative of modified geospatial images by the output device (col. 5, paragraph [0044] of Melero et al.).

As to claim 6, the combination of Hutchison et al. and Melero et al. disclose that wherein said step of providing an output device comprises the further step of providing a computer and an operably associated monitor (col. 4, paragraph [0041] of Melero et al.), and wherein said step of generating a visual output comprises the further step of generating a visual image on the monitor (col. 5, paragraphs [0044-0045] of Melero et al.).

As to claim 7, The combination of Hutchison et al. and Melero et al. disclose that wherein said step of selectively modifying the digitized data comprises the further step of compressing the digitized data (col. 5, paragraph

[0044] of Melero et al.), and said step of causing said output device to receive and process the modified digitized data comprises the further step of decompressing the digitized data (col. 5, paragraph [0045] of Melero et al.).

As to claim 8, the combination of Hutchison et al. and Melero et al. disclose that wherein said step of selectively modifying the digitized data comprises the further step of geocoding the digitized data (col. 4, paragraph [0037] of Melero et al.), wherein pixel locations of at least one image are correlated with corresponding geographic locations on the globe in a manner enabling each image to be identified as to geographic location when the image is retrieved from the digitized data and is reproduced in visible format (col. 4, paragraphs [0035-0040] of Melero et al.).

As to claim 9, the combination of Hutchison et al. and Melero et al. disclose that wherein said step of selectively modifying the digitized data includes the further steps of subsequently adding stored data derived from a source other than the aerial view source to the digitized data in a manner enabling visual comparison between an image captured by the aerial view source and the stored data (col. 2, paragraphs [0024-0025] of Melero et al.), and generating an image from the digitized data which image includes both data corresponding to geospatial images obtained from the downward looking collection platform and also subsequently added stored data (col. 7, lines 1-59 of Hutchison et al.).

As to claim 10, the combination of Hutchison et al. and Melero et al. disclose that wherein said step of selectively modifying the digitized data includes

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a further step of orthorectifying images captured by the aerial view source (col. 4, paragraph [0035], and col. 5, paragraph [0042] of Melero et al.).

As to claim 11, the combination of Hutchison et al. and Melero et al. disclose that wherein said step of obtaining geospatial images from an aerial view source comprises the further step of obtaining geospatial images from a commercial imagery satellite (col. 1, paragraph [0002] of Melero et al.).

As to claim 12, the combination of Hutchison et al. and Melero et al. disclose that including further steps of: providing a guidable image acquisition platform capable of (col. 3, paragraph [0024] of Melero et al.); and providing guidance to the image acquisition platform prior to obtaining digital data corresponding to geospatial images (col. 3, paragraph [0027] of Melero et al.).

As to claim 13, the combination of Hutchison et al. and Melero et al. disclose that including the further step of applying prescriptive data to a commercial operation (col. 2, paragraph [0023] of Melero et al.).

As to claim 14, Hutchison et al. disclose apparatus for rapidly obtaining geospatial data (col. 3, lines 25-42), processing the geospatial data (col. 5, lines 27-35), and disseminating the geospatial data to at least one ultimate user (col. 6, lines 42-45), comprising: an aerial view source of geospatial images having a first transmitter (col. 3, lines 50-52), disposed to obtain geospatial images (col. 3, lines 50-55), to render the geospatial images as digital data (col. 4, lines 32-40), and to transmit the digital data in radiant energy form to the earth (col. 4, lines 32-40, and col. 7, lines 17-22); a first radiant energy receiver located remotely from said aerial view source (col. 7, lines 15-25). However, Hutchison et al. do

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not disclose that disposed to receive digital data from said aerial view source, to generate corresponding communication signals, and to transmit the communications signals; a communications channel disposed in communicable relation to said radiant energy receiver; and a data processor communicably connected to said communications channel, disposed to receive the communications signals, to selectively modify the digitized data, and to transmit selectively modified data to a user.

Melero et al. disclose that disposed to receive digital data from said aerial view source (col. 2, paragraph [0024]), to generate corresponding communication signals (col. 2, paragraph [0023]), and to transmit the communications signals (col. 2, paragraph [0025]); a communications channel disposed in communicable relation to said radiant energy receiver (col. 2, paragraph [0026]); and a data processor communicably ("image assembly server", Fig. 1, item 12) connected to said communications channel (col. 2, paragraph [0025]), disposed to receive the communications signals (col. 2, paragraph [0025]), to selectively modify the digitized data (col. 3, paragraph [0028]), and to transmit selectively modified data to a user (col. 4, paragraphs [0035-0038]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the modified digitized data through the communications channel of Melero et al. to the system of Hutchison et al. in order to provide delivery of the desired output image to the user via an electronic medium such as the Internet.

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As to claim 15, the combination of Hutchison et al. and Melero et al. disclose that wherein said communications channel includes the Internet (col. 3, paragraph [0028] of Melero et al.).

As to claim 16, the combination of Hutchison et al. and Melero et al. disclose that further comprising: an output device communicably coupled to said communications channel (col. 3, paragraph [0028] of Melero et al.), disposed to render the selectively modified digital data in a graphical form (col. 4, paragraph [0035] of Melero et al.).

As to claim 17, the combination of Hutchison et al. and Melero et al. disclose that wherein said output device includes a computer and an operably associated monitor (col. 4, paragraph [0041] of Melero et al.).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al. in view of Melero et al. as applied to claim 14 above, and further in view of Melero et al. (Pub. No.: US 2003/0215110).

2. As to claim 20, the combination of Hutchison et al. and Melero et al. do not disclose the apparatus according to claim 14, wherein said aerial view source of geospatial images is an imagery satellite incorporating a digital camera, disposed in earth orbit.

Melero et al. disclose that wherein said aerial view source of geospatial images is an imagery satellite incorporating a digital camera (col. 8, paragraph [0094]), disposed in earth orbit (col. 8, paragraph [0094]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to provide the digital camera of Melero et al. to the system of Hutchison et al. in order to provide greater resolution.

Allowable Subject Matter

3. Claims 3, and 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 3, the combination of Hutchison et al. and Melero et al. do not disclose the method according to claim 1, wherein said step of transmitting modified digitized data to an ultimate user includes the further steps of: transmitting modified digitized data through the communications channel to a radiant energy transmitter; transmitting the modified digitized data to a commercial communications satellite in the form of radiant energy; and retransmitting the modified digitized data as radiant energy to a radiant energy receiver located remotely from the point of retransmission, wherein the radiant energy receiver is proximate the ultimate user of the geospatial data.

As to claim 18, the combination of Hutchison et al. and Melero et al. do not disclose the apparatus according to claim 14, further comprising: a transmitter communicably coupled to the communications channel, disposed to transmit the selectively modified digitized data to a commercial communications satellite in the form of radiant energy; and a second radiant energy receiver located remotely from said data processor, disposed to receive the selectively modified digital data as radiant energy signals from the commercial communications

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satellite, and an output device communicably connected to said second radiant energy receiver, disposed to render the digital data in visible form.

As to claim 19, the combination of Hutchison et al. and Melero et al. do not disclose the apparatus according to claim 18, wherein said output device includes a computer and an operably associated monitor.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H Doan whose telephone number is 703-305-6311. The examiner can normally be reached on 9:30 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung A Nay can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Phuoc Doan

Phuoc Doan *Nick Corsaro*

**NICK CORSARO
PRIMARY EXAMINER**